Commonwealth of Kentucky
Division for Air Quality

PERMIT STATEMENT OF BASIS

TITLE V DRAFT PERMIT NO. V-06-042
HICKMAN PIPE AND TUBE CORPORATION
HICKMAN, KENTUCKY
AUGUST 26, 2006
HOSSEIN RAKHSHAN, PERMIT REVIEWER
PLANT I.D. # 21-075-00024
ACTIVITY #: APE20050002
AI #: 38116

Change(s) to Permit:

On August 02, 2005, Hickman Pipe and Tube Corporation submitted a permit renewal application to its existing title V permit (V-00-033) for a pipe manufacturing plant in Hickman, KY. There will be no change in their emissions or their production rate.

SOURCE DESCRIPTION:

Hickman Pipe and Tube Corporation is a pipe manufacturer located in Fulton County, Kentucky. Hickman Pipe uses hot rolled carbon steel and forms the steel to make pipe. The pipe is primarily used for sprinkler fire protection systems.

Large rolls of steel are shipped to the plant, unwound, and fed into the rolling mill. The mill bends the steel to the required pipe diameter. No emissions are derived from this operation. The rolling mill can process 70-100 feet per minute depending on the width of the steel being bent.

After the steel is formed into the correct diameter, an electric resistance welder (ERW) is used to seal the pipe. The welding of the pipe is continuous, and fugitive emissions are generated from the welding operation.

Once the pipe is welded, the pipe is cooled in a water bath. The water is recycled, and the contaminants from the water are disposed of as hazardous waste sludge. The waste material is handled by Safety-Kleen.

After the pipe is cooled, the pipe is sent through a continuous operating spray booth that has four fixed nozzles. The spray booth is totally enclosed and is only opened for maintenance. The four nozzles have a rated capacity of 0.01 gallons per minute, each. The paint is pumped from a single drum to a line splitter where the paint is delivered to the four nozzles. The paint overspray is drained into a drum at the bottom of the booth. An exhaust fan rated at 0.75 horsepower is attached to the unit, and a metal paint filter captures overspray from the exhaust fan.

The paint used in the spray booth is Smoke Pipe-Kote Enamel CP-2501 which is produced by Waterlac Coatings, Inc. The paint has a VOC content of 69.9% by weight and a density of 7.5 pounds per gallon. Toluene constitutes 65% of the paint by weight. Hickman Pipe also uses a thinner, CP-2501T in the spray coating operation. The thinner is 100% VOC by weight and 75% toluene by weight.

The pipe is virtually dry to touch after leaving the spray booth. However, the pipe is sent to a drying room that is heated by electric lamps. The temperature of the room ranges from 100 ^{o}F to 140 ^{o}F. The pipes are in the room for 12 minutes and then shipped outside to the yard area.

There are two small parts washers at the plant. Their capacities are 34 gallons and 17 gallons. They are exclusively used for maintenance. The parts washers are listed as insignificant activities.

COMMENTS:
Hickman Pipe and Tube Corporation is classified as a major source due to their emissions of toluene from the spray coating operations. The metal paint coating (CP-2501) contains 70% VOC by weight and 65% toluene by weight. Each spray nozzle has a rated capacity of 0.01 gallons per minute, or 0.6 gallons per hour. With four nozzles, the total paint usage of the spray booth totals 2.4 gallons per hour. Based on 8760 hours per year, the potential to emit, the total paint usage is 21, 024 gallons per year. The paint has a density of 7.5 pounds per gallon; therefore, the potential amount of paint used in the spray booth is 157,680 pounds per year, 78.84 tons per year. The VOC amount emitted from the spray booth is 55.11 tons per year, with toluene emitted at a rate of 51.24 tons per year. All VOCs are assumed to be emitted from the spray booth and not captured by the paint filters. Also, the toluene emitted from the spray booth is assumed to be 100% released to the atmosphere. A Title V permit is required since the source emissions of toluene exceed the 10 ton per year limitation. Paint waste is disposed of by Safety-Kleen.

During the review, the Division considered the applicability of 401 KAR 59:225, New miscellaneous metal parts and products surface coating operations. Although the spray booth was constructed after the classification date, February 4, 1981, the source is not a major source in the category of VOCs. The VOC amount emitted from the facility is less than the 100 ton threshold. Subsequently, the regulation does not apply to Hickman Pipe and Tube Corporation.

After ruling out the applicability of 401 KAR 59:225, the Division considered the applicability of 40 CFR Part 63, Subpart B, Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112 (j). 40 CFR Part 63, Sec. 63.40 (b), Overall requirements, states the following:

> "The requirements of §§ 63.40 through 63.44 of this subpart apply to any owner or operator who constructs or reconstructs a major source of hazardous air pollutants after the effective date of section 112(g)(2)(B) (as defined in § 63.41)..."

The effective date defined in § 63.41 is the effective date specified by the permitting authority at the time the permitting authority adopts a program to implement section 112(g) with respect to construction or reconstruction or major sources of HAP, or June 29, 1998 whichever is earlier. The spray booth was constructed in 1989. Therefore, 40 CFR Part 63, Subpart B, Requirements for Control Technology Determinations for Major Sources in Accordance With Clean Air Act Sections, Sections 112(g) and 112 (j), is not applicable to Hickman Pipe and Tube Corporation.

Hickman Pipe and Tube Corporation will be issued a Federally-enforceable Title V permit for their facility.

CREDIBLE EVIDENCE:

. This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.